

REMARKS

In the Official Action of July 13, 2006, claims 1, 6, 7, 9 and 21-22 were rejected under 35 U.S.C. § 103(a), as obvious over Kajikawa et al. (U.S. Patent No. 5,478,879) in view of Harada et al. (U.S. Patent No. 6,150,469). This ground of rejection is respectfully traversed.

The Examiner states that Kajikawa et al. discloses all aspects of the claimed invention, including the use of an underneutralized super absorbent composition, but is silent on the amount of hydrotalcite required, and that Harada et al. remedies this alleged deficiency of Kajikawa et al. The Harada et al. reference has been additionally cited as disclosing the use of hydrotalcite in a superabsorbent composition in a ratio of from 1:1 to 1:10 as stated in the present claims. In support of this statement, the Examiner has cited col. 17, lines 7-14 of Harada et al.

Applicant respectfully traverses the proposition that Kajikawa et al. discloses all aspects of the claimed invention absent the amount of hydrotalcite. Applicant further traverses the proposition that Harada et al. discloses the amount of hydrotalcite used in the present invention.

Applicant claims an absorbent core composition comprising an underneutralized super absorbent polymer and a layered double hydroxide anionic clay present in the claimed ratios. Applicant notes here that the claimed composition comprises two elements: a super absorbent polymer and hydrotalcite. Applicant has discovered the optimal ratios of these two elements to provide a superior liquid absorbing composition for use in absorbent articles such as diapers. This is neither taught nor suggest in the cited references, which are discussed in more detail below.

Kajikawa et al. discloses a composition comprising a hydrated gel of an absorbent resin and a fine absorbent resin powder. Kajikawa et al. does not teach, suggest or disclose a composition comprising a super absorbent polymer and hydrotalcite to be used in an absorbent garment. The use of hydrotalcite in Kajikawa et al. is merely for aiding the mixing of the hydrated gel of an absorbent resin (A) and the fine absorbent resin powder (B). See col. 8, lines 46-56. Applicant notes that Kajikawa et al. is concerned with manufacturing SAP (superabsorbent polymer). It is also noted that chemical and physical uniformity is something that manufacturers generally strive to attain, and that these materials are discussed in the production/ manufacturing stage of the product. Applicant respectfully submits that the double layered hydroxide anionic clay of the reference (hydrotalcite) is merely present at the time of mixing a hydrated gel of an absorbent resin and a fine absorbent resin powder (col 8, lines 50-

53), and that the mere presence of the clay in Kajikawa et al. does not amount to a disclosure of a composition comprising hydrotalcite.

Applicant further submits that components manufactured according to Kajikawa et al. are precursors to compositions disclosed in the current invention. In contrast, applicant respectfully submits that the combination of super absorbent polymer and clay are related in the current invention as components combined following super absorbent polymer production and are to be used in an absorbent core of an absorbent article. Therefore, applicant traverses the Examiner's statement that Kajikawa et al. discloses a composition comprising a super absorbent polymer and a layered double hydroxide anionic clay. Accordingly, applicant submits that all the claimed limitations of the present invention are not taught, suggested or disclosed by the Kajikawa et al. reference.

"[I]t is error to treat the claim as a mere catalog of separate parts, in disregard of the part-to-part relationships set forth in the claim that give the claim its meaning. The focus must always be on the entirety of the claimed invention." *Structural Rubber Products Co. v. Park Rubber Co.*, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984).

Harada et al. relates to super absorbent polymer production. Harada et al. provides a superior super absorbent polymer (by treating it with denaturants for uniform cross-linking), and an efficient way of doing the same. Harada et al. does not disclose a "composition" for use in a matrix of an absorbent core in absorbent articles. The Harada et al. materials are actually precursors to the components used in the current invention. As mentioned above, the current invention concerns itself with the combination that occurs following SAP production, whereas Harada et al. is concerned with SAP production and does not concern itself with any composition or combination after production. In the context of providing a "superior" super absorbent polymer (which basically means that all, or almost all, polymer is uniformly cross-linked), Harada et al. discloses the treatment of super absorbent polymer with a gaseous denaturing agent, to improve its properties. The objective is to provide uniform cross-linking in all the super absorbent polymer material (col. 4, lines 18-67; col. 5, lines 1-13; and col. 13, lines 14-20). In an alternate method, Harada et al. discloses that instead of a gaseous denaturing agent, a mixture of a liquid denaturing agent and a water insoluble compound may be used (in powdered form, to yield a powdery denaturant substance) to treat the super absorbent polymer, thereby improving its properties (col. 5, lines 14-63; col. 14, lines 3-16). Harada et al. mentions that an example of the water insoluble compound may be hydrotalcite. The use of a water-insoluble compound is, at

most, to provide the liquid denaturing agent in a powdered form, because it is this powdered form that allows the liquid denaturing agent to provide a uniform cross linking in, and efficient reaction with, all the super absorbent polymer material (col. 17, lines 47-67; col. 18, lines 1-43). Accordingly, applicant submits that the use of hydrotalcite in relation to other components in Harada et al. is not analogous to the role of layered double hydroxide anionic clay as in the present compositions.

Applicant notes that the Harada et al. materials are used for treating super absorbent polymer, not for making a composition as presently claimed. Accordingly, applicant respectfully submits that the only composition that Harada et al. discloses is a powdery denaturant substance which is used to treat a super absorbent polymer, and such composition has no bearing on the composition of the present invention.

Accordingly, Kajikawa et al. and Harada et al., either singly or in combination, do not teach or suggest the claimed invention. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03 (7th ed., Rev. 1, Feb. 2000). "[I]t is error to treat the claim as a mere catalog of separate parts, in disregard of the part-to-part relationships set forth in the claim that give the claim its meaning. The focus must always be on the entirety of the claimed invention." *Structural Rubber Products Co. v. Park Rubber Co.*, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Accordingly, applicant respectfully submits that a *prima facie* case of obviousness has not been established.

Further, Harada et al. discloses that the denaturing agent is unsafe for users, and finds it preferable to remove any part of the denaturant in the super absorbent polymer after preparation. This is further substantiated by the fact that, according to Harada et al., it is advantageous to remove all of the denaturing agent from the super absorbent polymer once the super absorbent polymer material has been treated (col. 4, lines 29-33). Since Harada et al. does not recognize any advantage of a water-insoluble compound other than to provide a liquid denaturant in powdered form to improve the reaction efficiency, Harada et al. would seek to have all the powdery denaturant removed (including the water insoluble compound, such as hydrotalcite), and therefore, at the very least, one skilled in the art would not be motivated by Harada et al. to make a composition of a super absorbent polymer and hydrotalcite. On the contrary, one of ordinary skill in the art would be motivated to remove all the powdery denaturant substance from the super absorbent polymer to remove any traces of the associated liquid denaturant, thereby

removing the water-insoluble compound (such as hydrotalcite) as well. Accordingly, there is no desirability, following the teachings of Harada et al., to make a composition of a super absorbent polymer and hydrotalcite, which is the modification proposed by the Examiner.

"The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 23 U.S.P.Q.2d 1780, 1783-84 (Fed. Cir. 1992). Accordingly, it is submitted that Harada et al. does not teach, suggest or disclose, either singly or in combination with Kajikawa et al., a composition of hydrotalcite with a superabsorbent polymer.

In summary, Applicant's invention, in contrast to Kajikawa et al. or Harada et al. (that merely disclose super absorbent polymer production), is a novel and advantageous composition of a super absorbent polymer and a layered double hydroxide anionic clay which is not disclosed in or taught by the references. In fact, to the extent that Harada et al. attempts to eliminate any traces of the denaturant (along with associated hydrotalcite) from the super absorbent polymer, there is evidence the Harada et al. teaches away from the instant invention.

"The fact that the applicant proceeded contrary to accepted wisdom of the prior art is strong evidence of nonobviousness." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303, 312 (Fed. Cir. 1983).

Additionally, applicant does not agree that the references disclose the ratio of super absorbent polymer to hydrotalcite as presently claimed herein. A mere discussion of the ratios of super absorbent polymer with a denaturant, and a denaturant with a water insoluble compound (such as hydrotalcite), in unrelated contexts, does not amount to a disclosure of a ratio of super absorbent polymer and hydrotalcite (layered double hydroxide anionic clay). "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03 (7th ed., Rev. 1, Feb. 2000).

Finally, to the extent that Harada et al. is solely concerned with improving the super absorbent polymer characteristics, by improving the cross-linking within the polymer, this reference has no relevance to the problem of providing a super absorbent composition comprising super absorbent polymers along with other materials. Thus, the use of these ratios to arrive at a composition comprising a super absorbent polymer and hydrotalcite lacks a legal rationale. The use of hindsight reconstruction can be detected by the lack of any rationale for the combination of the prior art references. *See; e.g., Monarch Knitting Machine Corp. v. Sulzer Morat GmbH*, 45 U.S.P.Q.2d 1981-82 (Fed. Cir. 1998).

Claim 2 has been rejected under 35 U.S.C. 103(a) as being obvious over Kajikawa et al. in view of Harada et al. and further in view of Jones, Sr. (U.S. Patent No. 3,794,034). This ground of rejection is traversed.

Applicant respectfully submits that claim 2, which depends from claim 1, is allowable under 35 U.S.C. 103(a) for at least the reasons stated above with respect to the traversal of the rejection of claim 1. "If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious." M.P.E.P. § 2143.03 (7th ed., Rev. 1, Feb. 2000).

Claims 10-12, 17-18, 20 and 23-24 stand rejected under 35 U.S.C. 103(a) as obvious over Kajikawa et al. in view of Harada et al. and Masaki et al. (U.S. Patent No. 5,821,179). This ground of rejection is respectfully traversed.

Applicant respectfully traverses this rejection on the same basis as the rejection of claim 1 above. Applicant has argued above that independent claim 1 is patentable over Kajikawa et al. in view of Harada et al. Claim 10, and claims dependent thereon, are believed to be similarly allowable under 35 U.S.C. 103(a), because Masaki et al. does not remedy the above noted deficiencies of Kajikawa et al. and Harada et al.

Claim 13 stands rejected under 35 U.S.C. 103(a) as being obvious over Kajikawa et al., Harada et al. and Masaki et al., in view of Jones, Sr. This ground of rejection is also traversed.

Claim 13 depends from claim 10, and is allowable for the reasons presented above with respect to claim 10.

In view of the aforementioned facts and reasons, the present application is now believed to overcome the remaining rejections in this application, and to be in proper condition for allowance. Reconsideration and withdrawal of the rejections is respectfully solicited. The Examiner is invited to contact the undersigned at the telephone number listed below to discuss any matter pertaining to the status of this application.

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